

AMENDMENT

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows:

In the Claims:

1. (Currently amended) An isolated nucleic acid molecule encoding a protein with the function of a wheat starch synthase, selected from the group consisting of
 - (a) a nucleic acid molecule encoding a protein ~~comprising~~ having the amino acid sequence of SEQ ID NO:2,
 - (b) a nucleic acid molecule ~~comprising~~ having the nucleotide sequence of SEQ ID NO:1 or a ribonucleotide sequence corresponding therewith;
 - (c) ~~a nucleic acid molecule which hybridizes under stringent conditions with one of the nucleic acid molecules mentioned under (a) or (b) or is complementary thereto, and~~
 - (d) a nucleic acid molecule whose nucleotide sequence deviates from the sequence of a nucleic acid molecule mentioned under (a), (b) or (c) (a) or (b) owing to the degeneracy of the genetic code.
2. (Previously amended) The nucleic acid molecule as claimed in claim 1, which is a DNA molecule.
3. (Previously amended) The DNA molecule as claimed in claim 2, which is a cDNA molecule.
4. (Previously amended) The nucleic acid molecule as claimed in claim 1, comprising regulatory elements.
5. (Previously amended) The nucleic acid molecule as claimed in claim 1, which is an RNA molecule.
- 6-7. (Cancelled)
8. (Currently amended) A vector containing a ~~DNA~~ the isolated nucleic acid molecule as claimed in claim 1.
9. (Previously amended) The vector as claimed in claim 8, wherein said nucleic acid molecule is operably linked in sense orientation to regulatory elements which ensure transcription and synthesis of a translatable RNA in prokaryotic or eukaryotic cells.

10. (Previously amended) The vector as claimed in claim 8, wherein said nucleic acid molecule is operably linked in sense orientation with respect to regulatory elements, and wherein a cosuppression effect is achieved in prokaryotic or eukaryotic cells.

11. (Previously amended) The vector as claimed in claim 8, wherein said nucleic acid molecule is operably linked in antisense orientation with respect to regulatory elements which ensure the synthesis of an untranslatable RNA in prokaryotic or eukaryotic cells.

12. (Currently amended) A host cell which is transformed with ~~[[a]]~~ the nucleic acid molecule as claimed in claim 1, or with ~~[[a]]~~ the vector as claimed in claim 8, or a cell which is derived from the host cell.

13. (Cancelled)

14. (Currently amended) A process for the preparation of a protein encoded by the nucleic acid molecule as claimed in claim 1, wherein ~~[[a]]~~ the host cell as claimed in claim 12 is cultured under conditions which permit said protein to be synthesized, and said protein is isolated from ~~the~~ cultured host cells and/or ~~the~~ culture medium.

15. (Currently amended) A process for generating a transgenic plant cell, wherein

(a) ~~[[a]]~~ the nucleic acid molecule as claimed in claim 1 or

(b) ~~[[a]]~~ the vector as claimed in claim 8

is integrated into the genome of a plant cell.

16. (Currently amended) A transgenic plant cell which has been transformed with ~~[[a]]~~ the nucleic acid molecule as claimed in claim 1, or with ~~[[a]]~~ the vector as claimed in claim 8, or a cell which is derived from the plant cell.

17-26. (Cancelled)

27. (Currently amended) An isolated nucleic acid molecule encoding a protein with the function of a wheat starch synthase, selected from the group consisting of

(a) a nucleic acid molecule encoding a protein ~~comprising~~ having the amino acid sequence of SEQ ID NO:2,

(b) a nucleic acid molecule ~~comprising~~ having nucleotides 9-570 of SEQ ID NO:1 or a ribonucleotide sequence corresponding therewith;

(c) a nucleic acid molecule which hybridizes ~~under stringent conditions~~ with ~~one of~~ the nucleic acid molecule of molecules mentioned under (a) or (b) or is complementary thereto, wherein hybridization conditions comprise a hybridization temperature of 65 to 70°C, a

hybridization buffer salt concentration of 2X SSC, a wash temperature of 40 to 75°C, and a wash buffer salt concentration of 0.2X SSC; and

(d) a nucleic acid molecule whose nucleotide sequence deviates from the sequence of a nucleic acid molecule mentioned under (a), (b) or (c) owing to the degeneracy of the genetic code.

28. (New) An isolated nucleic acid molecule encoding a protein with the function of a wheat starch synthase, wherein the nucleic acid molecule hybridizes with nucleotides 9-570 of SEQ ID NO:1 or a ribonucleotide sequence corresponding therewith, under hybridization conditions comprising a hybridization temperature of 65 to 70°C, a hybridization buffer salt concentration of 2X SSC, a wash temperature of 40 to 75°C, and a wash buffer salt concentration of 0.2X SSC, or the complement thereof.

29. (New) A nucleic acid molecule whose nucleotide sequence deviates from the sequence of the nucleic acid molecule of claim 28, owing to the degeneracy of the genetic code.